

NYU Program for Surgical Weight Loss

August/September, 2004

This One Is For The Kids

Kids in America- Kym Wilde

Looking out a dirty old window
Down below the cars in the
City go rushing by
I sit here alone
And I wonder why

Kids- Robbie Williams

And we'll paint by numbers
Till something sticks
Don't mind doing it for the kids
(So come on) jump on board
Take a ride (yeah)
(Doin' it all right)
Jump on board feel the high
'Cause the kids are alright

There can hardly be a worse existence than that of a morbidly obese teenager. I know. I was one once. This newsletter is about being a fat kid, about the place for banding in teenagers, some results, and a few tips for kids who are thinking about having a band.

1. Supersize Me

Super Size Me, in which Morgan Spurlock eats only McDonalds for a month and documents the results, couldn't have come at a more opportune time. The US is knee-deep in an epidemic caused by consumption, and our children are at grave risk. In a study of adolescents across 15 countries, adolescents in the United States had the highest prevalence of overweight, according to an article in the January issue of The Archives of Pediatrics & Adolescent Medicine, a journal of the American Medical Association. Inge Lissau, Ph.D., Copenhagen, Denmark, and colleagues compared the BMI and prevalence of BMI at or above the 85th percentile and 95th percentile (overweight) in adolescents in 13 European countries, Israel and the United States. The researchers looked at the BMIs of 29,242 boys and girls aged 13 to 15 years from Austria, Czech Republic, Denmark, Flemish Belgium, Finland, France, Germany, Greece, Lithuania, Ireland, Israel, Portugal, Slovakia, Sweden and the United States. The authors found that the highest prevalence of overweight was found in the United States and the lowest in Lithuania. The prevalence of overweight in the United States was 12.6 percent in 13-year-old boys, 10.8 percent in 13-year-old girls, 13.9 percent in 15-year-old boys, and 15.1 percent in 15-year-old girls. Other studies have shown that fully 21% of US adolescents are overweight and 4% are obese. Similar changes have occurred in United Kingdom, Australia and Europe. In England, one child in 15 is obese, and between 1994 and 1998, the prevalence of overweight children grew from 13% to 20%. McCarthy recently showed in the BMJ that the waist circumference in 11 to 16 year old British children increased 6.2 cm between 1977 and 1997. This is even worse than the increase in mean BMI in that same time period. In 1977, only 6% of kids had a BMI at the 91st percentile. By 1997, 17% were at the 91st percentile.

Strangely enough, the fattest country in the world is Nauru. It was hopelessly poor, then became hugely rich on the back of fertilisers made from guano or bird droppings. Imagine a whole country of Morgan Spurlocks and that's Nauru. This primitive culture, which ate simple food for eons, just couldn't cope with McDonalds, Coca Cola and Microsoft all at once. Even weirder, the same thing has happened in Beijing, where teenage boys are fast becoming hugely fat. Likewise American Indians in Arizona who have casino licences, as compared to their relatives who fled to the comparatively simple life in Mexico 100 years ago. These primitive cultures, used for eons to simple food, just couldn't cope with McDonalds, Coca Cola and Microsoft all at once.

All these people have developed the inevitable end point of living like poor Morgan did for a month, but doing it for their whole life. That end point is diabetes and premature death. Fully 70% of the adult population of Nauru and of the Pima Indians are diabetic. Diabetes is one thing, but it's what you get in the long run that's the real problem - blind, legless cardiac cripples on kidney dialysis machines, and lives ending prematurely.

Australian kids reportedly watch 2.8 hours of television per day and 5000 food commercials per year, advertisements that cost \$424 million. Kids eat 3500 calories a day yet need only 1500. A cheeseburger, fries and a shake is 1800 calories. A whopping 22 per cent of kids' calorie intake comes from snacks, and 25 per cent of all food sold is "super sized". You have to walk for 45 minutes just to walk off a can of Coke. Kids don't play outside, nor do they explore away from home. They're bubble-wrapped and kept indoors. They're bored so they eat, watching TV. The ads make the food seem cool. When they go to school there's not enough sport, so they're bored and restless. They SMS each other endlessly and play computer games. They just get fatter and fatter.

In the recent Nurses Study on diabetes, each 2 hours of TV watching led to 23% increase in obesity and 14% increase in diabetes, compared to 5% if just sitting at work. Each hour of brisk walking led to 24% reduction in obesity and 34% reduction in diabetes. 30% Obesity and 43% diabetes could be prevented by watching less than 10 hours TV per week. The way kids are these days, telling the poor little darlings "No, you can't watch TV" may be very hard. Just imagine that you are your grandmother, then say it. You'll be fine.

In the US, in 1991, 34% of school kids got 20 minutes exercise per day at school. By 1997, it was down to 24%, and by 2003, 3rd grade kids get 25 minutes per WEEK, not per day. 10.6 million US preschoolers are obese, not chubby, but really fat. Australia is exactly the same as the US. Melissa Wake, from the Centre for Community Child Health, Royal Children's Hospital, Victoria, recently studied 2863 Australian primary school kids. Seventeen per cent were overweight, but 5.7 per cent were obese. Alarmingly, 80 per cent of their parents said they weren't worried by that. They should be.

Jeffrey Schwimmer, a paediatric gastroenterologist at the University of

California, compared quality of life (QOL) scores for severely obese children aged 5-18 to those for normal weight children and those having chemotherapy for cancer. The obese children had the same QOL as those receiving chemotherapy.

Does this all really matter, or is it do-gooder doctors just interfering in peoples rights to choose how to live. Yes to both questions. It matters, because fat kids become fat adults, and fat adults get sick. Ask around to see how easy it is to get life insurance if your BMI is over 45. Given the real explosion of teenage obesity, it is worrying on a national level that 80% of obese children become obese adults. Obesity in childhood is associated with increased morbidity and mortality in adult life. Kids are getting the diseases their grandparents get - diseases almost unknown in children 10 years ago are now commonplace. More than 30 per cent of all new cases of Type 2 diabetes are in children. Ferraro et al studied 6,767 children over 20 years and showed that childhood overweight was associated with 1.57 times risk of death, especially in African Americans. McTigue et al studied a sample of 9179 people and found that 80% of adult obese patients were obese by age 17 years.

Fat adults get sicker than thin adults and there is profound early loss of life associated with obesity. If you wonder at the veracity of claims from the medical profession about the link, ask around to see how easy it is to get life insurance if your BMI is over 45. Those guys worked this out years ago. Between 1986 and 2000, the number of people with a BMI above 40 has quadrupled. This is the scary figure. About 8% of US adults have a BMI over 40, a total number of severely obese people greater than the population of Australia. The problem is that there are simply millions and millions of these people, and they do get sicker, quicker, and yes, they do die young. A recent paper in JAMA describes 195,000 people who did a phone survey. There were 20.9% obese, and 2.3% people with a BMI > 40. The risk of disease odds ratio if overweight or obese were Diabetes x 7.37, Hypertension x 6.38, Arthritis x 4.4, Asthma x 1.88. To put it another way, if your BMI was over 30, you were 7.37 times as likely to be diabetic etc., etc. This applied to all races, all education levels, and smoking or not. Another recent study in the New England Journal of Medicine looked at 901,000 people in 1982 with a subsequent 16 yr follow up. There were 57,145 deaths. If a patient's BMI was > 40, the death rate higher increased by 52% in men and 62% in women. Cancer deaths from Esophagus, colon, liver, gall bladder, pancreas, non - Hodgkins lymphoma, all women's cancers all significantly increased. 14% of all cancer deaths in men and 20% in women were in obese patients.

Fontaine et al have recently demonstrated a 13-year loss of life for men with BMI over 45 kg/m2 who smoke, and seven years if they don't

As well as dying young, fat adults cost the State a lot of money. One fifth of the US health budget for the over 50's goes on treating diabetes, and that's on a background of skinny kids 25 years ago. Imagine what it'll be 25 years from now when all the fat kids become fat adults, and the few remaining skinny kids now get fat too. Diabetes is going to cripple the health system of this country, and it comes in a straight line from fat.

Doctors still have a role in advising their patients. Well, here's some advice from a doctor. Firstly, every parent should agitate at every school for the schools to reintroduce physical exercise as often as possible. Secondly, every parent should write to their congressman/woman and Senator demanding restrictions on TV food advertising to children between 3 and 7 pm. Hillary Clinton recently had 10 pages in the Times Magazine about the Health crisis in this country, and about one line was on obesity. It should be one page. She needs to get the message from her constituents. Someone has to take these guys on. If you can't smoke a cigar in the Oak Bar at The Plaza anymore, for some very nebulous reasons, your kid shouldn't be brainwashed from the age of 2 that Coke and McDonalds and Snickers are the way to eternal happiness.

What if a child is already severely, morbidly obese, with co - morbidity? In 1991, the NIH Consensus conference on obesity came up with the revolutionary concept that surgery was the ONLY effective treatment for severe obesity, set at a BMI of 40. The 2 major types of surgery used in New York, gastric bypass and lap - band, both generate about 60% weight loss out to 5 years, compared to 5% with diet exercise and psychology combined. Christou has shown a huge improvement in longevity for obese people who have had surgery. They had 1035 s patients from 1983 to 2002 having weight loss surgery and 5476 obese controls who had not had weight loss surgery. The 62% Weight loss in the surgical group was associated with a 89% fall in risk of death, with only 0.6% dying in the study period, compared to 6% of the non surgical group. The big change in this surgery has been the introduction of the lap- band into the US 3 years ago. This is a much safer surgery, having a one tenth the risk of dying of gastric bypass, simply because there is no bowel surgery yet at 5 years the weight loss is the same.

NYU Medical Centre has the largest Lap Band experience in the world. We have performed over 3,200 lap bands since 1996. I expanded treatment of severely obese teenagers to offer them the lap band. The LAP-BAND System has been demonstrated to be safe and effective in adults, is a safer procedure than the gastric bypass, is adjustable in case of pregnancy or other need for additional nutrition, and is more easily and safely reversed, if necessary. Dr Ren and I are now performing lap bands on teenagers at NYU, and have so far treated 10 children aged 12 to 18, with BMI's 41 to 65. The indications have been as follows

- Body Mass Index (BMI) > 40, or BMI 35-39 with documented severe co-morbidities (ie. Sleep apnea, Type II diabetes mellitus)
- Attended and compliant with conservative weight-reduction programs such as medically supervised diet, exercise and behavior modification program.
- Support from treating pediatrician
- Evaluation by adolescent psychologist to be sufficiently mature mentally and emotionally to benefit from the procedure and to comply with the behavior modification required. Evaluation performed both with and without parents.
- Have parental approval and support
- Be the patient's decision
- Undergo pre-operative nutritional evaluation, counseling and education by bariatric nutritionist, both with and without parents. (2-3 pre-op visits)

I have treated 55 teenagers now, aged 12 to 18 and have a minimum 3 yr follow up on 16 of them. Weight at surgery was 125+ 19 kg (83 - 220), and BMI 42.4 + 8.2kg/m2 (31 - 71). Weight loss data is in the table below. At 3 years, %EWL was 70% and fifteen of 18 children had at least 50% EWL. At 3 years, thirteen of 18 teenagers are not obese, BMI < 30 kg/m2.

mths	6	12	18	24	36	48	60
No.	4	21	18	18	16	5	3
WT (kg)	110	96	93	91	92	88	72
BMI (kg/m2)	36	32	30.6	29.6	29.2	29	27.3
%EWL	30	50.4	62.6	69.3	70	63	65

Lap Band is a safe and effective therapy for morbidly obese adolescents. Obesity is not a weakness, it's a disease, a disease that causes many other diseases that lead to premature death. Unfortunately there is no treatment other than surgery that can free obese people from their burden and cure them of their disease. Lap Band surgery offers the safest route to that weight loss, in teenagers as well as in adults. Finally, a message for the parents- take your children to see Super Size Me. Somehow we have to get kids to see that it's not cool to drive up to a window, hand over \$5 and get 2000 calories in return. In a weird way this little movie might be about the last days of life in the US as we know it, before we became just like Nauru.

2. NAASO Abstract

I have just had a paper accepted for presentation at NAASO, the most eminent group in the US looking at the study of Obesity, in Vegas in November. Here's the abstract of the paper. "Obesity in children is now an epidemic. Severely obese children are suffering all the consequences well known in adults. Bariatric surgery, including laparoscopic adjustable gastric banding (lap-band) has been shown to be the only effective treatment for severe obesity in adults, and also that it cures co - morbidity. A decision was made to offer lap - banding to severely obese adolescents. Forty-four children aged 12 - 19 (15.2 years) have had lap band. Weight was 131+ 17kg (83 - 220kg). BMI was 44.1+ 7.8 kg/m2 (31 - 71). Co -

morbidity included 3 diabetics, 1 sleep apnea on CPAP, 2 hypertensives, and one Perthe's disease of the hip. There were no operative or 60 day morbidity or mortality. One child was lost to follow -up, but returned at 3 years. Mean Follow - up was 37.2+ 19 months (1-70 months). Eighteen children have had a lap-band for at least 3 years. Compliance was excellent, with 12.2 visits per child (7 - 22 visits) at 2 years. Weight loss mirrors that seen in adults with lap-band or gastric bypass. At three years, BMI fell to 29+ 6(23 - 47), and this was maintained to 5 years. 83% of children were no longer obese, with BMI <30 kg/m2. EWL was 70+ 21% (37-101%), and this was maintained to 5 years. One child needed a port revision , and another needed reposition of the band, both cases done as day stay procedures. All co-morbidity resolved. The lap-band is a valid option for the care of severely obese adolescents."

3. Living with a Band

Finally, here's a segment from our new book (yeah, we know, where is it?). This is about being a teen and having a band

Obese teens have a special challenge. They are thrust into a social circle that usually includes sitting through classes with thin kids who hassle the fat kid in the room. To them it's harmless; to the obese teenager it is hell. MTV occasionally glamorizes obese rappers, like the late great Biggie Smalls. You can easily laugh at John Goodman being funny, Drew Carey being weird, the King of Queens simply bewildered by life, and Cartman suffering on South Park, but the reality for 99.9% of obese kids is that being obese sucks.

Here's a little scene with one teenager: Is it real?
"How was your first day at school, son?"
"Well, mom, I heard someone yell out 'Hey, fat boy', and turned around thinking it was my friends from my old school. But, hey, it was my new friends. It was great!" Severely obese teenagers carry a very heavy burden, far heavier even than the 200 pounds around their middle. Life seems prematurely foreshortened and all types of opportunities that non-obese kids take for granted are limited to the obese teen.

Many kids turn inward, unable to socialize, embarrassed by their appearance, often living sad lonely lives. External appearances may not reflect what's really happening, and they may become clowns, or aggressive leaders like Biggie Smalls and Fat Joe. Would they rather be thin? Check out Missy Elliott now and three years ago. Check out Queen Latifah. It is impossible to over-estimate how hard it is to replicate their efforts. The lap band delivers obese teenagers a shot at having a normal life, so the real kid comes free.

If you've made the choice to go through with surgery, here are a few tips to help you deal with it. Be proud of your decision. It takes courage to go through with this life changing surgery and the discipline it takes to continue. You will never be able to ignore the rules of diet and exercise. It is a lifetime commitment to a better you, a better looking, more confident you. Don't waste the opportunity you've given yourself. We've gone over this before, but you really do need to remain strictly on course and be in touch with your doctor and your feelings. Get to know and trust your surgeon and the doctor's team so you can share stuff with them.

Pay attention to adjustments as a way to be sure your band delivers. You can never let down your guard. If you think your band needs an adjustment, don't put off seeing your doctor. You have to be the judge as to whether it needs tightening or not. The doctor will give you good advice, but he or she is not living in your body day and night. You are. You will get to know the right adjustment for you.

You do NOT have to be different with your friends and play some silly role. Chances are, you'll become more like them, because their lives have never been dominated by food, just like your life no longer is. You just have to make wise choices at McDonald's, Taco Bell and wherever else you go with the crowd.

When you're with them, most times no one will notice that you choose to eat the junior burger, have a small fries, and ALWAYS, drink diet soft drink. Lots of average size kids do. Don't make a big deal of ordering small amounts. If you end up with a Whopper, eat half and forget about the other portion, same with fries. No one can force you to eat the whole thing, so take control of your own food. Be subtle and quiet about what you're eating, it will surprise you how little they notice what you are eating. Likely, they won't notice that you've only eaten half of your burger or fries, that is if you don't make mention of it.

Resist super-sizing food. It isn't worth the moment of pleasure. Like any vice, it will drag you down, if you let food start to dominate your appetite. Go against the trend.

When they ask if you want a humungous coke and popcorn at the movies, just say no thanks, "I'll take a medium diet coke, and small popcorn". Don't get the hugest bucket at KFC. You won't be able to eat the chicken anyway. When Pizza Hut offers you a free drink, get Pepsi Max. Buy a small Hershey's, not the thick one. Better still don't buy one at all. Keep in mind that alcohol has many calories. So does fruit juice. So does chocolate milk. Repeat the mantra-ALWAYS drink a diet soft drink. Have a big attitude, not a big serving.

So, you get it wrong, you slip slightly on occasion. Don't beat up on yourself. Hang in there. This is a long road and you haven't blown it, really. It's just a bump in the road. Try a bit harder next time. The outcome you want and deserve is just waiting for you. This is so true. Practice silence when it comes to telling your friends that you've had surgery, at least for a while. School kids aren't the nicest people on earth. Expect that some of them will treat you differently. Once you have lost the weight, some kids who never looked at you before will now realize you're reasonable enough to talk. This may be a strange turn-around-enjoy it. Some kids may ask you to join their group. Right. Others will publicly taunt you because they are intimidated by the strength you've shown making this decision. Let it wash over you. Most of it is silly posturing on their part.

Your friends will still be your friends, and most will be happy for you. Those that aren't . . . well, they aren't your friends anyway. You need to work through how it all feels to you on the heels of having a new lap band. The wait-to-tell could be over a year. Just pace yourself. What's the rush? If you are in control, the weight will come off and that's more satisfying than revealing the process.

If you feel lonely dealing with this stuff, wonder why you did it if they STILL give it to you at recess, and how you wish you could till eat the whole Whopper sometimes, tough it out. Think of "Gladiator", whether you're a boy or a girl. Russell Crowe's character is in the Circus ring in Rome, possibly preparing to die. He clenches his fist and puts it over his heart, saying "Strength and Honor". Then he squints into the sun and says, in a deep grumbly voice that still gives me goose bumps, "My name is Maximus". No wonder he got the Oscar. It's amazing. This is a character that knows who he is, and has made a decision and is proud of it.

As you lose weight, enjoy the benefits-buy some cool things off the rack, get some sun at the beach, buy a top that shows your stomach, go dancing and really dance, ride a bike, hike, have fun. Flirt a little. It's fun. Enjoy looking and feeling good. Be confident with your new self. You have to respect yourself. Have fun.

This whole concept of banding teenagers may seem weird to many people. It is, I guess, but not as weird as being 15 years old, 400 lbs, on 10 tablets, depressed, with no friends and no real future. This is the way forward for children such as this.

George Fielding